

Polyatomic Compounds

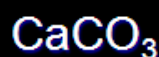
- poly = many
- atomic = atoms
- polyatomic = many atoms that tend to stay together and have an ionic charge

- Ex. Nitrate NO_3 is a polyatomic ion consisting of Nitrogen and Oxygen.

- It has an ionic charge of 1-

- Polyatomic compounds are formed when a metal combines with polyatomic ion

- Ex. calcium carbonate



- Copy the table 2 from page 196 onto the back of your periodic table

- Polyatomic compounds end in "ate" except for hydroxide

- Use the crisscross rule to form the formulas for polyatomic compounds

Lesson 5 Polyatomic Compound Notes.notebook

Oxyacids

- Oxyacids are special polyatomic ions
- They are formed when hydrogen combines with a polyatomic ion
- Ex. Hydrogen + sulfate = sulfuric acid
- H is always + 1

- Copy table from page 198 onto your periodic table

Try these:

1. Sodium phosphate
 Na_3PO_4
2. Calcium sulfate
 CaSO_4
3. Potassium chlorate
 KClO_3
4. Aluminum hydroxide
 $\text{Al}(\text{OH})_3$
5. Magnesium bromide
 MgBr_2
6. Sodium sulfate
 Na_2SO_4
7. Aluminum bicarbonate
 $\text{Al}(\text{HCO}_3)_3$
8. Potassium carbonate
 K_2CO_3

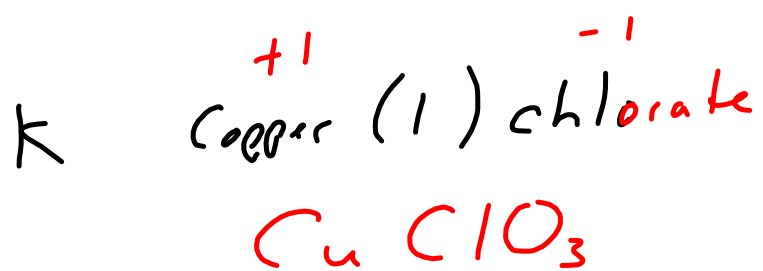
P 196

Polyatomic Ions

Name	Symbol	Charge
Nitrate	NO_3	-1

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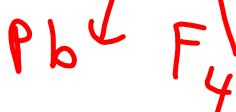
Name	Symbol	Charge
nitric acid	HNO_3	-1



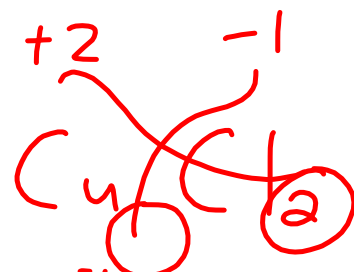
m) iron (iii) chloride



p lead (iv) fluoride



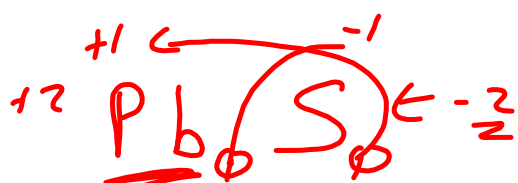
i Copper(ii) chloride



j iron(iii) bromide



k ()



L ()

lead(ii) sulfide

P ()

Q ()

Tin(iv) oxide ✓

R ()

Copper(i) iodide

Polyatomic Compound Worksheet

1. Write the formulas for the following compounds. Use the criss cross rule.

a. magnesium sulfate



b. sodium chlorate



c. aluminum nitrate



d. potassium hydroxide



e. lithium phosphate



f. calcium carbonate



g. beryllium sulfate



h. sodium bicarbonate



i. magnesium hydroxide



j. aluminum phosphate



k. copper(i) chlorate



l. calcium sulfate



m. nitric acid



n. carbonic acid



o. sulfuric acid



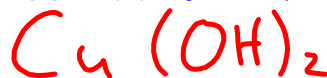
p. lead(ii) nitrate



q. phosphoric acid



r. copper(ii) hydroxide



s. iron(ii) phosphate



t. calcium chlorate



2. Write the names for the following compounds

